

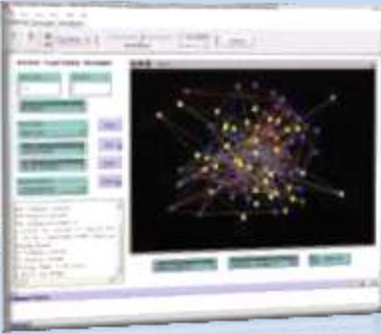
## Cyber Science & Technology



### CHALLENGES

- Mission modeling and cyber situational awareness for assuring effective missions
- Cyber agility to disrupt/deny adversary attack planning
- Cyber resiliency to fight through and recover from attack
- Hardware & Software "Root of Trust" for computational platform assurance
- Full spectrum cyber operations for Cyberspace Superiority

### **Near (FY11 - FY15)**



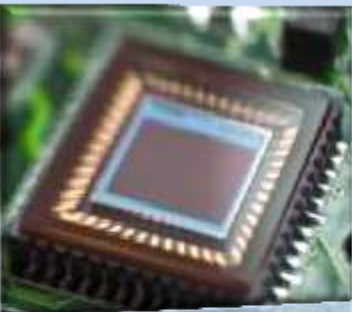
- Cyber Agility via IP hopping and instruction set morphing at sub-second rates
- Tactical cyber ops able to simultaneously affect multiple nodes (ESC)
- Comm Exploitation capabilities for airborne ISR (intel Community)

### **Mid (FY16 – FY20)**



- Content/Mission-Aware trusted router 10Gb/sec for 24 AF
- 80% mission aware traffic for 24 AF
- Integrated Information Operations / SIGINT (USCYBERCOM)

### **Far (FY21 – FY25)**



- Mathematically provable mission assurance
- Agile infrastructure anticipates & reconfigures in real time
- Integrated/synchronized execution of effects in cyber, air and space